



PLACER COUNTY GRAND JURY

The 49 Fire – The Perfect Storm

Report Date: May 31, 2011

The 49 Fire – The Perfect Storm

Summary

On August 30, 2009, two arson-initiated fires occurred near the intersection of Rock Creek Road and Highway 49 in Auburn. Due to weather conditions, the two fires merged into one nearly unmanageable, fast moving fire which consumed 343 acres, 62 homes, and two businesses. The 49 Fire caused approximately \$40,000,000 in property damage and cost \$1.3 million to fight.

The Grand Jury finds the response, recovery, investigation, and subsequent process improvements to be effective. First responders, county agencies, volunteer organizations, churches and individual community members provided maximum effort under near impossible firefighting conditions.

Background

During the examination of various Placer County Government operations this year, the Placer County Grand Jury determined that members of the public continue to have questions about the 49 Fire which occurred on August 30, 2009, near the intersection of Highway 49 and Rock Creek just north of the City of Auburn. Additional questions have been asked about response times, dispatch errors, and communication problems between the various fire departments that responded to the fire.

Investigation Methods

The Grand Jury interviewed and toured the Placer County Sheriff's Dispatch Unit, the Office of Emergency Services (OES), Cal Fire/Grass Valley Emergency Command Center, and the Cal Fire Auburn Investigation Center. The Grand Jury researched and reviewed media reports, official documents, maps, and the weather conditions on August 30, 2009. The Grand Jury also cross-referenced differing opinions and information, and triangulated the findings with any information which could be given to the Grand Jury and could be reported to the public.

Note, there is an ongoing criminal investigation which is currently outside the Grand Jury's jurisdiction. The Placer County District Attorney continues to serve in an advisory role to Cal Fire in the fire investigation.

Facts

Environmental Conditions

- On August 30, 2009, at 3:10 PM, the Auburn Airport Remote Automated Weather Station records indicate the temperature was 90 degrees, 13% Relative Humidity, winds were 14 miles per hour and gusting to 22 miles per hour.
- Because of these weather conditions, the Ignition Component was 100. This means all (100%) burning embers being generated by a fire would start fires down-wind of the fire-line.

Fire Spread

- On August 30, 2009, at 2:22 PM, the Cal Fire Grass Valley Incident Command Center (GVICC) received a 911 call from a citizen at the KOA campgrounds near Auburn. It was a report of a grass fire in the area of Highway 49 and Rock Creek near Auburn. Cal Fire/Placer County Fire Dispatchers immediately sent the first alarm assignments.
- At 2:28 PM, a Cal Fire Battalion Chief, who was in the area, arrived on the scene and reported the fire was one to two acres in size. He immediately requested additional engines and aircraft to be added to the units initially dispatched.
- At 2:32 PM, Incident Commander in-place and structures were reported involved.
- At 2:37 PM, the fire jumped across Locksley Lane and 15 to 20 multiple structures were on fire with one quarter to one half mile of spotting fires generated by the wind blown ignited embers. The fire spread resembled a classic V-pattern for wild land fires.
- At 2:41 PM, the fire reached the Shale Ridge Road. There were multiple structures on fire. The fire was spreading rapidly and there were long range spotting fires from the wind blown embers.
- The leeward side of the ridge between Shale Ridge Road and Dry Creek, combined with sierra gray pine trees, weather conditions, and an ignition component of 100, resulted in embers falling on the subdivision in the Dry Creek area.
- At 2:47 PM, the fire reached Dry Creek Road and the Parkway area and many buildings were on fire.
- At approximately 2:47 PM, a second fire started at the Northeast corner of the property of the Seventh Day Adventist Church at 12225 Rock Creek Road.

Because of the intensity of the original fire, this new fire was drawn toward the larger fire and the two merged into a powerful firestorm.

- At 3:30 PM, the fire jumped across Dry Creek Road into the Saddleback area.
- At 6:00 PM, the fire stopped spreading as the air temperature started cooling and the sustained winds and gusts subsided.

Fire Response

- In the first hour of the fire the following resources were requested: 55 engines, 10 air tankers, one very large air tanker (Boeing 747), four helicopters, four hand crews, four bulldozers, five ambulances, and additional command officers.
- State and local response agreements among fire districts and agencies were used in the deployment of resources.
- The closest fire station only sent one of its two engines as its other engine was responding to an incident in a town north of Auburn per the aforementioned response agreements.
- Cal Fire's Computer-Aided Dispatch system and radios were used to immediately dispatch requested equipment.
- Total fire resources used: 90 engines; 13 hand crews; 18 bulldozers; 15 water tenders; 700 personnel; 10 air tankers; six helicopters.
- Cooperating Agencies: Various local and surrounding county fire departments; Placer County Sheriff's Department, California Highway Patrol, and other law enforcement agencies; Caltrans; California Emergency Management Agency (CalEMA); AMR Ambulance; utility companies; Placer County Office of Emergency Services; Placer County Government staff; Red Cross; Salvation Army.
- Cal Fire officials stated that because of the sustained and gusting winds, the heat, the low humidity, and the readily available dry fuel on the ground, it would have been difficult, if not impossible, to stop this fire even if the Deputy Chief had arrived with 20 fire trucks at 2:37PM that afternoon.

Fire Damage

- Acres Burned – 343
- Single Family Homes Destroyed – 62
- Single Family Homes Damaged – 18
- Commercial Buildings Destroyed – 2
- Commercial Buildings Damaged – 14
- Vehicles Destroyed – 41
- Commercial Vehicles Destroyed – 32
- Estimated Structural Loss – \$40 Million
- Firefighting Cost – \$1.3 Million
- Lives Lost – 0

Cause of Fire

- Scientific methods as outlined in the Wildfire Origin & Cause Determination Handbook were deployed by an investigation team consisting of forensic engineers, electrical engineers, and others.
- Two points of ignition:
 - Corner of Highway 49 and Rock Creek Road;
 - Northeast corner of the property of the Seventh Day Adventist Church at 12225 Rock Creek Road.
- Initial speculation that a utility line and power pole was the cause of the fire was ruled out.
- The ignition sources for the fires are unknown as the sources were either consumed in the burn or taken away at the time of ignition.
- Accidental ignition was ruled out during the course of the investigation.
- The Cal Fire investigation team determined the cause of the fire was arson.

Changes in Procedures

- Cal Fire took the 49 Fire as an opportunity to enhance the Cal Fire Annual Operations Plan, which includes increasing the equipment initially dispatched for summer wild land fires, and both State Response Areas (SRA) and Local Response Areas (LRA) receive the same level of fire suppression support.
- The Sheriff's Department and Placer County Information Technology Department applied for and received grant monies to update the Computer Aided Dispatch (CAD) programs, so fire agencies can "talk to each other" while lowering

operating costs, reducing errors, increasing efficiency, and shortening response times.

- The Emergency Operations Plan and the Local Hazard Mitigation Plan have been updated and published. The Standard Incidence Response Plan (SIRP) has also been reviewed, revised, and published. The plan is continually reviewed and updated.

Findings

- F1. The cause of the fire was ruled as arson.
- F2. The weather, topographical, and vegetation conditions at the time of the fire were so great that a faster response or additional resources would not have prevented the rapid fire spread and the subsequent losses.
- F3. No significant dispatch and response issues were uncovered that would have had a material effect on the outcome of the fire.
- F4. Cal Fire and the Placer County Sheriff's Department have refined response plans and are implementing new technological solutions.
- F5. Cal Fire's arson investigation remains active with the Placer County District Attorney serving in an advisory role.

Recommendations

The Placer County Grand Jury has no recommendations.

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